

REMARKS

I. 35 U.S.C. §112

The rejection of claims 2 and 14 has been obviated by appropriate amendment.

II. 35 U.S.C. §102(e) - Nevins

The claimed technology monitors acoustic signals to provide feedback information that a listener can act upon to enhance the operation of an audio system. The technology may determine frequency domain parameters as in claim 1 or perform a frequency domain transformation as in claims 3 and 7 of an acoustic signal. As claimed, the technology provides continuous feedback to the listener to ensure a more satisfying overall experience.

Nevins is directed to setting a microphone volume level. In Nevins, a speech recognition system samples an analog microphone signal approximately 220 times in a 20 msec sampling window. (Col. 3, lines 11-20). The processing system determines whether the microphone volume level is adequate by comparing the signal level against a threshold, and further based upon any signal clipping or a signal-to-noise ratio. (Figure 3, Col. 4, lines 36-44, Col. 5, lines 1-7). In response, the processing system adjusts the microphone volume level to arrive at an adequate volume level. (Col. 5, lines 54-63).

The Office Action indicates that Figure 1, element 24 and Col. 4, lines 24-60 Nevins disclose a calculation of frequency domain parameters. However, element 24 is the central processing unit (CPU) that performs common processing tasks, such as executing a word processing program. (Col. 3, lines 53-62). However, the CPU does not perform a frequency transformation or frequency parameter determination during the process of setting the microphone volume level. Rather, the CPU attempts to set the microphone volume level through reliance on parameters such as signal level, clipping characteristics, or signal-to-noise ratio derived from the digitized microphone signal as it varies over time.

With regard to Col. 4, lines 24-60 specifically, Nevins describes the CPU as comparing microphone volume levels generated by user speech against average amplitude and background noise thresholds. The volume level comparisons are not performed continuously. Instead, they are performed when a new user is added to the speech recognition system, or when the user directs the processing system to execute microphone testing software. (Col. 4, lines 22-30, Col. 6, lines 49-63). Nevins does not provide the claimed continuous feedback that may give the listener a more satisfying experience.

Nevins does not perform frequency analysis on the input signal to obtain microphone placement information, nor does Nevins continuously provide feedback to the listener. As a result, Nevins does not disclose limitations present in claims 1-9, 11-15, and 17-18 and therefore does not anticipate those claims. Accordingly, the Applicants respectfully request withdrawal of the rejection of those claims under 35 U.S.C. §102.

III. 35 U.S.C. §103(a) - Nevins and Bakis

The Office Action asserts that a combination of Nevins and Bakis renders claims 10 and 16 unpatentable. However, the Applicants respectfully submit that, even assuming a motivation to combine Nevins and Bakis can be found, the combination does not disclose or suggest the subject matter of claims 10 and 16.

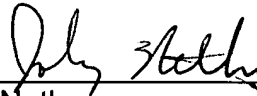
The Nevins-Bakis combination is a microphone diagnostic system. The system tests the microphone configuration at isolated intervals (Nevins, Col. 4, lines 22-30, Col. 6, lines 49-63) and displays diagnostic information for the listener (Bakis, Col. 2, lines 20-31). The Nevins-Bakis combination does not provide continuous feedback to the listener as claimed.

The Nevins-Bakis combination fails to teach or suggest the claimed subject matter. Accordingly, the Applicants respectfully request withdrawal of the rejection of claims 10 and 16 in view of Nevins and Bakis.

SUMMARY

Because Nevins and Bakis, alone or in combination, fail to teach or suggest the claimed subject matter, the Applicants respectfully submit that the pending claims are in condition for allowance. The Examiner is invited to contact the undersigned attorneys for the Applicants via telephone if the Examiner has any questions, comments, or concerns, or if a telephone conference would expedite examination of this application.

Respectfully submitted,



John F. Nethery
Registration No. 42,928
Attorney for Applicant

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200